

# EXHIBIT C

SEQUENCE LISTING

<110> East, Peter David  
Brown, Susan Elizabeth

<120> Antifungal peptides

<130> 76786

<140> 10/590,539

<141> 2005-02-23

<150> AU 2004900938

<151> 2004-02-24

<150> PCT/AU05/00234

<151> 2005-02-23

<160> 62

<170> PatentIn version 3.3

<210> 1

<211> 64

<212> PRT

<213> Galleria mellonella

<400> 1

Met Lys Phe Thr Gly Ile Phe Phe Ile Ile Met Ala Ile Ile Ala Leu  
1 5 10 15

Phe Ile Gly Ser Asn Glu Ala Ala Pro Lys Val Asn Val Asn Ala Ile  
20 25 30

Lys Lys Gly Gly Lys Ala Ile Gly Lys Gly Phe Lys Val Ile Ser Ala  
35 40 45

Ala Ser Thr Ala His Asp Val Tyr Glu His Ile Lys Asn Arg Arg His  
50 55 60

<210> 2

<211> 64

<212> PRT

<213> Galleria mellonella

<400> 2

Met Asn Phe Thr Gly Ile Phe Phe Met Ile Met Ala Ile Ile Ala Leu  
1 5 10 15

Phe Ile Gly Ser Asn Glu Ala Ala Pro Lys Val Asn Val Asn Ala Ile  
20 25 30

Lys Lys Gly Gly Lys Ala Ile Gly Lys Gly Phe Lys Val Ile Ser Ala  
35 40 45

Ala Ser Thr Ala His Asp Val Tyr Glu His Ile Lys Asn Arg Arg His  
50 55 60

<210> 3  
<211> 68  
<212> PRT  
<213> Galleria mellonella

<400> 3

Met Arg Leu Ser Ile Ile Leu Val Val Val Met Met Val Met Ala Met  
1 5 10 15

Phe Val Ser Ser Gly Asp Ala Ala Pro Gly Lys Ile Pro Val Lys Ala  
20 25 30

Ile Lys Lys Gly Gly Gln Ile Ile Gly Lys Ala Leu Arg Gly Ile Asn  
35 40 45

Ile Ala Ser Thr Ala His Asp Ile Ile Ser Gln Phe Lys Pro Lys Lys  
50 55 60

Lys Lys Asn His  
65

<210> 4  
<211> 39  
<212> PRT  
<213> Galleria mellonella

<400> 4

Lys Val Asn Val Asn Ala Ile Lys Lys Gly Gly Lys Ala Ile Gly Lys  
1 5 10 15

Gly Phe Lys Val Ile Ser Ala Ala Ser Thr Ala His Asp Val Tyr Glu  
20 25 30

His Ile Lys Asn Arg Arg His  
35

<210> 5  
<211> 33  
<212> PRT  
<213> Galleria mellonella

<400> 5

Gly Gly Gln Ile Ile Gly Lys Ala Leu Arg Gly Ile Asn Ile Ala Ser  
1 5 10 15

Thr Ala His Asp Ile Ile Ser Gln Phe Lys Pro Lys Lys Lys Asn  
20 25 30

His

<210> 6  
<211> 342  
<212> DNA  
<213> Galleria mellonella

<400> 6  
ctacgggtaa catctttatt agttatcgta aaataacaga ttgttagaaat gaagtttaca 60  
ggaatattct tcataattat ggcgatcatt gccctcttta tagggtaaaa tgaagcggcg 120  
cctaaagtca atgttaatgc cattaagaag ggagggaaagg ccataggaaa aggatttaaa 180  
gtaatcagtg cggcgagtac agcgcgtgac gtctatgaac acattaaaaa cagaaggcac 240  
taataaaaacc aaaaataatt atttattttta taaggttaatt ttaagacata taatgtatgt 300  
tgcaaattat taagtgaaat aaaatataaa atatttttg tt 342

<210> 7  
<211> 349  
<212> DNA  
<213> Galleria mellonella

<400> 7  
gctttgtcta cgggttaacat ctttattagt tatcgtaaaa taacagattt tagaaatgaa 60  
ttttacagga atattctca tgattatggc gatcattgcc ctctttataa ggtcaatga 120  
agcggcgccct aaagtcaatg ttaatgccat taagaaggga ggaaaggcca taggaaaagg 180  
attnaaagta atcagtgcgg cgagtacagc gcatgacgtc tatgaacaca ttaaaaacag 240  
aaggcactaa tagaacccaaa aataatcatt tattttataa ggttaattttta agacatataa 300  
tgaatgttgc aaatttattaa gtggaataaa atataaaata tttttgtt 349

<210> 8  
<211> 420  
<212> DNA  
<213> Galleria mellonella

<400> 8  
gttatttttt aaagatccaaa gcgttaattaa ttcattgtgc tgggtctgaa aggaacaaaa 60  
tgagattgtc cataatattt gtcgttgc tgggtgtat ggctatgttt gtgagcgtg 120  
gagatgcggc gcctggaaaa attcctgtga aagcgattaa aaaaggaggg caaattttt 180  
gtttaaagctt gctgttgc aatatagcga gtactgcaca tgacataattt agccagttca 240  
aaccggaaaa gaagaaaaac cattgaggat ttaataaaaa atcgttcaat aatatattta 300  
ataataataa taaattttac ttatattact ataataataat taatattttt aattgtgcca 360  
tttttagtttt ataaattata ttaagtatta atttataat taataaaaaa gcttaaatat 420

<210> 9		
<211> 192		
<212> DNA		
<213> Galleria mellonella		
<400> 9		
atgaagg <del>tta</del> caggaatatt cttcataatt atggcgatca ttgc <del>cc</del> ctctt tatagggtca	60	
aatgaag <del>cgg</del> cgcctaaagt caatgttaat gccattaaga agggagggaaa ggccatagga	120	
aaaggat <del>tta</del> aagtaatcag tgcggcgagt acagcgc <del>at</del> g acgtctatga acacattaaa	180	
aacagaaggc ac	192	
<210> 10		
<211> 192		
<212> DNA		
<213> Galleria mellonella		
<400> 10		
atgaat <del>ttta</del> caggaatatt cttcatgatt atggcgatca ttgc <del>cc</del> ctctt tatagggtca	60	
aatgaag <del>cgg</del> cgcctaaagt caatgttaat gccattaaga agggagggaaa ggccatagga	120	
aaaggat <del>tta</del> aagtaatcag tgcggcgagt acagcgc <del>at</del> g acgtctatga acacattaaa	180	
aacagaaggc ac	192	
<210> 11		
<211> 204		
<212> DNA		
<213> Galleria mellonella		
<400> 11		
atgagattgt ccataatatt ggtcg <del>tt</del> gtg atgatggtga tggctatgtt tgtgagc <del>agt</del>	60	
ggagat <del>gcgg</del> cgcctggaaa aattcctgtg aaagcgatta aaaaaggagg gcaaattatt	120	
ggtaaag <del>ctc</del> tgcgtggaat caatatacg agtactgcac atgacataat tagccagttc	180	
aaaccgaaaa agaagaaaaa ccat	204	
<210> 12		
<211> 117		
<212> DNA		
<213> Galleria mellonella		
<400> 12		
aaagtcaatg ttaatgccat taagaaggga ggaaaggcca taggaaaagg atttaaagta	60	
atcagtgc <del>gg</del> cgagtacagc gcatgacg <del>tc</del> tatgaacaca ttaaaaacag aaggcac	117	
<210> 13		
<211> 99		
<212> DNA		
<213> Galleria mellonella		
<400> 13		
ggaggc <del>aaa</del> ttattggtaa agctctgc <del>gt</del> ggaatcaata tagcgag <del>tac</del> tgcacatgac	60	

ataattagcc agttcaaacc gaaaaagaag aaaaaccat

99

<210> 14  
<211> 67  
<212> PRT  
<213> Spodoptera litura  
<400> 14

Met Lys Leu Thr Lys Val Phe Val Ile Leu Ile Val Val Val Ala Leu  
1 5 10 15

Leu Val Pro Ser Glu Ala Ala Pro Gly Lys Ile Pro Val Lys Ala Ile  
20 25 30

Lys Lys Ala Gly Ala Ala Ile Gly Lys Gly Leu Arg Ala Ile Asn Ile  
35 40 45

Ala Ser Thr Ala His Asp Val Tyr Ser Phe Phe Lys Pro Lys His Lys  
50 55 60

Lys Lys His  
65

<210> 15  
<211> 67  
<212> PRT  
<213> Manduca sexta  
<400> 15

Met Lys Leu Thr Ser Leu Phe Ile Phe Val Ile Val Ala Leu Ser Leu  
1 5 10 15

Leu Phe Ser Ser Thr Asp Ala Ala Pro Gly Lys Ile Pro Val Lys Ala  
20 25 30

Ile Lys Gln Ala Gly Lys Val Ile Gly Lys Gly Leu Arg Ala Ile Asn  
35 40 45

Ile Ala Gly Thr Thr His Asp Val Val Ser Phe Phe Arg Pro Lys Lys  
50 55 60

Lys Lys His  
65

<210> 16  
<211> 66  
<212> PRT  
<213> Bombyx mori  
<400> 16

Met Asn Ile Leu Lys Phe Phe Val Phe Ile Val Ala Met Ser Leu  
1 5 10 15

Val Ser Cys Ser Thr Ala Ala Pro Ala Lys Ile Pro Ile Lys Ala Ile  
20 25 30

Lys Thr Val Gly Lys Ala Val Gly Lys Gly Leu Arg Ala Ile Asn Ile  
35 40 45

Ala Ser Thr Ala Asn Asp Val Phe Asn Phe Leu Lys Pro Lys Lys Arg  
50 55 60

Lys His  
65

<210> 17  
<211> 41  
<212> PRT  
<213> *Heliothis virescens*

<400> 17

Gly Lys Ile Pro Ile Gly Ala Ile Lys Lys Ala Gly Lys Ala Ile Gly  
1 5 10 15

Lys Gly Leu Arg Ala Val Asn Ile Ala Ser Thr Ala His Asp Val Tyr  
20 25 30

Thr Phe Phe Lys Pro Lys Lys Arg His  
35 40

<210> 18  
<211> 66  
<212> PRT  
<213> *Bombyx mori*

<400> 18

Met Tyr Phe Leu Lys Tyr Phe Ile Val Val Leu Val Ala Leu Ser Leu  
1 5 10 15

Met Ile Cys Ser Gly Gln Ala Asp Pro Lys Ile Pro Val Lys Ser Leu  
20 25 30

Lys Lys Gly Gly Lys Val Ile Ala Lys Gly Phe Lys Val Leu Thr Ala  
35 40 45

Ala Gly Thr Ala His Glu Val Tyr Ser His Val Arg Asn Arg Gly Asn  
50 55 60

Gln Gly  
65

<210> 19  
<211> 32  
<212> PRT  
<213> Galleria mellonella

<400> 19

Lys Val Asn Val Asn Ala Ile Lys Lys Gly Gly Lys Ala Ile Gly Lys  
1 5 10 15

Gly Phe Lys Val Ile Ser Ala Ala Ser Thr Ala His Asp Val Tyr Glu  
20 25 30

<210> 20  
<211> 28  
<212> PRT  
<213> Galleria mellonella

<400> 20

Gly Gly Gln Ile Ile Gly Lys Ala Leu Arg Gly Ile Asn Ile Ala Ser  
1 5 10 15

Thr Ala His Asp Ile Ile Ser Gln Phe Lys Pro Lys  
20 25

<210> 21  
<211> 23  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide primer

<220>  
<221> misc\_feature  
<222> (6)..(6)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (12)..(12)  
<223> N = inosine

<400> 21  
aaygttaayg cnathaaraa rgg

23

<210> 22  
<211> 21  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide primer

<220>  
<221> misc\_feature  
<222> (7)..(7)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (16)..(16)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> N = A, C, G or T

<400> 22  
ytcrtanacr gcrtgngcnt g

21

<210> 23  
<211> 23  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Oligonucleotide primer

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (6)..(6)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> N = inosine

<400> 23  
ggnggncara thathgnnaa rgc

23

<210> 24  
<211> 23  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Oligonucleotide primer

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (5)..(5)

<223> N = inosine	
<220>	
<221> misc_feature	
<222> (18)..(18)	
<223> N = inosine	
<220>	
<221> misc_feature	
<222> (21)..(21)	
<223> N = A. C. G or T	
<400> 24	
tgnnsndatda trtcrtgngc ngt	23
<210> 25	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide primer	
<400> 25	
gaggaaaggc cataggaaaa gg	22
<210> 26	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide primer	
<400> 26	
actcgccgca ctgattac	18
<210> 27	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide primer	
<400> 27	
ggggggcaga tcattggg	18
<210> 28	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide primer	
<400> 28	
ttatgtcatg ggccgtact	19

<210> 29  
<211> 337  
<212> DNA  
<213> *Galleria mellonella*

<400> 29  
ggtaacatct ttattagtta tcgtaaaata acagattgta gaaatgaagt ttacaggaat 60  
attcttcata attatggcga tcattgcctt ctttataggg tcaaatacgag cggcgccctaa 120  
agtcaatgtt aatgccatta agaaggagg aaaggccata ggaaaaggat ttaaagtaat 180  
cagtgcggcg agtacagcgc atgacgtcta tgaacacatt aaaaacagaa ggcactaata 240  
aaaccaaaaa taattattta ttttataagg taatttaag acatataatg tatgttgcaa 300  
attattaagt gaaataaaaat ataaaatatt ttttgtt 337

<210> 30  
<211> 32  
<212> PRT  
<213> *Galleria mellonella*

<400> 30

Lys Val Pro Ile Gly Ala Ile Lys Lys Gly Gly Lys Ile Ile Lys Lys  
1 5 10 15

Gly Leu Gly Val Ile Gly Ala Ala Gly Thr Ala His Glu Val Tyr Ser  
20 25 30

<210> 31  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Oligonucleotide sequence

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> N = A, C, G or T

<220>  
<221> misc\_feature  
<222> (9)..(9)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (12)..(12)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> N = A, C, G or T

<400> 31

ccnaargtnc cnathggngc

20

<210> 32  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide Primer

<220>  
<221> misc\_feature  
<222> (3)..(3)  
<223> N = A, C, G or T

<220>  
<221> misc\_feature  
<222> (12)..(12)  
<223> N = inosine

<220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> N = A, C, G or T

<400> 32  
tanacttcrt gngcdgtnc

20

<210> 33  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide Primer

<400> 33  
aggcttgggt gtaattggtg

20

<210> 34  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide Sequence

<400> 34  
gcagcaccaa ttacaccaaag

20

<210> 35  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide Sequence

<400> 35

taaaaagggt ctaggtgtgc	20
<210> 36	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide Sequence	
<400> 36	
gcggcgccaa gcacacctag	20
<210> 37	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide Primer	
<400> 37	
cttcaatctt agtgaaaact tcgc	24
<210> 38	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide Primer	
<400> 38	
ggatagtaact tcataattat atac	24
<210> 39	
<211> 23	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide Sequence	
<400> 39	
gttgcaggac ttaatactta gtg	23
<210> 40	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Oligonucleotide Sequence	
<400> 40	
gagtatttta ctaataagta tgtgg	25
<210> 41	

<211> 35		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Oligonucleotide Primer		
<400> 41		
ctcgagaaca atgaagttta caggaatatt cttca		35
<210> 42		
<211> 39		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Oligonucleotide Primer		
<400> 42		
tctagatttag tgccttctgt ttttaatgtg ttcatagac		39
<210> 43		
<211> 19		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Oligonucleotide Primer		
<400> 43		
cggccagagga cccctaaac		19
<210> 44		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Oligonucleotide Primer		
<400> 44		
atcgatgcca gaaccaagag a		21
<210> 45		
<211> 42		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Oligonucleotide Primer		
<400> 45		
tcgaaggaga tgccaccatg aagttacag gaatattctt ca		42
<210> 46		
<211> 33		
<212> DNA		
<213> Artificial Sequence		

<220>  
<223> Oligonucleotide Primer

<400> 46  
ttagtgcctt ctgttttaa tgtgttcata gac

33

<210> 47  
<211> 63  
<212> PRT  
<213> Galleria mellonella

<400> 47

Met Lys Leu Thr Gly Leu Phe Phe Met Ile Met Ala Met Leu Ala Leu  
1 5 10 15

Phe Val Gly Ala Gly Gln Ala Asp Pro Lys Val Pro Ile Gly Ala Ile  
20 25 30

Lys Lys Gly Gly Lys Ile Ile Lys Lys Gly Leu Gly Val Ile Gly Ala  
35 40 45

Ala Gly Thr Ala His Glu Val Tyr Ser His Val Lys Asn Arg His  
50 55 60

<210> 48  
<211> 38  
<212> PRT  
<213> Galleria mellonella

<400> 48

Lys Val Pro Ile Gly Ala Ile Lys Lys Gly Gly Lys Ile Ile Lys Lys  
1 5 10 15

Gly Leu Gly Val Ile Gly Ala Ala Gly Thr Ala His Glu Val Tyr Ser  
20 25 30

His Val Lys Asn Arg His  
35

<210> 49  
<211> 375  
<212> DNA  
<213> Galleria mellonella

<400> 49  
gtaacagtac caccgtgtac agtcgcagta gtttagtcttc aatcttagtg aaaacttcgc 60  
ttctctttat caaccatgaa gctgaccggt ctattttca tgatcatggc gatgctcgcc 120  
ctgtttgttg ggcgtggtca agccgaccct aaggtgccc ttggcgccat caagaagggt 180  
ggcaaaatata taaaaaaagg tcttggtgta attggtgccg ctggtacagc gcatgaagta 240  
tatagccacg tcaagaacag gcatttagatt cttgaagaat atatagtata taattatgaa 300

gtactatcct tttgtatatg tgactaagtg cataatgtaa agtcaaatga aatatatatt 360  
atttatcctc gtgcc 375

<210> 50  
<211> 192  
<212> DNA  
<213> Galleria mellonella  
  
<400> 50  
atgaagctga ccggcttatt tttcatgatc atggcgatgc tcgcccgtt tggtggcgct 60  
ggtcaagccg accctaaggt gcccattggc gccatcaaga agggtggcaa aattattaaa 120  
aaaggtcttg gtgtattgg tgccgctggt acagcgcatg aagtatatacg ccacgtcaag 180  
aacaggcatt ag 192

<210> 51  
<211> 117  
<212> DNA  
<213> Galleria mellonella  
  
<400> 51  
aaggtgcca ttggcgccat caagaagggt ggcaaaatata ttaaaaaagg tcttggtgta 60  
attggtgccg ctggcacagc gcatgaagta tatagccacg tcaagaacag gcattag 117

<210> 52  
<211> 63  
<212> PRT  
<213> Galleria mellonella  
  
<400> 52

Met Lys Leu Thr Gly Leu Phe Leu Met Ile Met Ala Val Leu Ala Leu  
1 5 10 15

Phe Val Gly Ala Gly Gln Ala Asp Pro Lys Val Pro Ile Gly Ala Ile  
20 25 30

Lys Lys Gly Gly Lys Ile Ile Lys Lys Gly Leu Gly Val Leu Gly Ala  
35 40 45

Ala Gly Thr Ala His Glu Val Tyr Asn His Val Arg Asn Arg Gln  
50 55 60

<210> 53  
<211> 38  
<212> PRT  
<213> Galleria mellonella  
  
<400> 53

Lys Val Pro Ile Gly Ala Ile Lys Lys Gly Gly Lys Ile Ile Lys Lys  
1 5 10 15

Gly Leu Gly Val Leu Gly Ala Ala Gly Thr Ala His Glu Val Tyr Asn  
20 25 30

His Val Arg Asn Arg Gln  
35

<210> 54  
<211> 462  
<212> DNA  
<213> Galleria mellonella

<400> 54  
acttcattgt gtacagttgc aggacttaat acttagtgaa ctacttactc ctcgttacca . 60  
accatgaagc tgaccggctct atttctcatg atcatggcgg tgctcgcgct gtttggc 120  
gctggtaag ccgaccctaa ggtgcccatt ggcgctatca agaagggcgg caaaattatt 180  
aaaaagggtc taggtgtgct tggcgccgct ggcacagcgc acgaagtgtta caaccacgtt 240  
aggaacaggc agtaacgtca tgcgtgattt ttgtacatac agtacttaca atacgattt 300  
tcttggctgt gatatatctt tagataaatt aatttataat accacatact tattgtaaa 360  
atactcaaattt atattgatta tagatacatt aataaattt aatttataca atattttgtt 420  
tttatgtaca atgcgaatag attctaccct ctgcctcgta cc 462

<210> 55  
<211> 192  
<212> DNA  
<213> Galleria mellonella

<400> 55  
atgaagctga ccggcttatt tctcatgatc atggcggtgc tcgcgtgtt tggcgct 60  
ggtcaagccg accctaagggt gcccattggc gctatcaaga agggcggcaa aatttataa 120  
aagggtctag gtgtgcttgg cggcgccggc acagcgcacg aagtgtacaa ccacgtt 180  
aacaggcagt aa 192

<210> 56  
<211> 117  
<212> DNA  
<213> Galleria mellonella

<400> 56  
aagggtccca ttggcgctat caagaaggc ggcaaaatata taaaaagggt tctaggtgt 60  
cttggcgcccg cgggcacagc gcacgaagtgc tacaaccacg ttaggaacag gcagtaa 117

<210> 57  
<211> 67  
<212> PRT  
<213> Spodoptera exigua

<400> 57

Met Lys Leu Thr Lys Val Phe Val Ile Val Val Val Ala Leu  
1 5 10 15

Leu Val Pro Ser Glu Ala Ala Pro Gly Lys Ile Pro Val Lys Ala Ile  
20 25 30

Lys Lys Ala Gly Thr Ala Ile Gly Lys Gly Leu Arg Ala Ile Asn Ile  
35 40 45

Ala Ser Thr Ala His Asp Val Tyr Ser Phe Phe Lys Pro Lys His Lys  
50 55 60

Lys Lys His  
65

<210> 58

<211> 54

<212> PRT

<213> *Hyblaea pueria*

<400> 58

Ala Met Ser Leu Val Ser Cys Ser Thr Ala Ala Pro Ala Lys Ile Pro  
1 5 10 15

Ile Lys Ala Ile Lys Thr Val Gly Lys Ala Val Gly Lys Gly Leu Arg  
20 25 30

Ala Ile Asn Ile Ala Ser Thr Ala Asn Asp Val Phe Asn Phe Leu Lys  
35 40 45

Pro Lys Lys Arg Lys His  
50

<210> 59

<211> 41

<212> PRT

<213> *Caligo illioneus*

<400> 59

Gly Lys Ile Pro Ile Asn Ala Ile Arg Lys Gly Ala Lys Ala Val Gly  
1 5 10 15

His Gly Leu Arg Ala Leu Asn Ile Ala Ser Thr Ala His Asp Ile Ala  
20 25 30

Ser Ala Phe His Arg Lys Arg Lys His  
35 40

<210> 60  
<211> 37  
<212> PRT  
<213> *Caligo illioneus*  
<400> 60

Arg Lys Ile Pro Val Glu Ala Ile Lys Lys Gly Ala Ser Arg Ala Trp  
1 5 10 15

Arg Ala Leu Asp Leu Ala Ser Thr Ala Tyr Asp Ile Ala Ser Ile Phe  
20 25 30

Asn Arg Lys Arg Glu  
35

<210> 61  
<211> 40  
<212> PRT  
<213> *Caligo illioneus*  
<400> 61

Gly Lys Ile Pro Val Glu Ala Leu Lys Lys Gly Ala Lys Val Ala Gly  
1 5 10 15

Arg Ala Trp Arg Ala Leu Asp Leu Ala Ser Thr Ala Tyr Asp Ile Ala  
20 25 30

His Leu Phe Asp Arg Lys Arg Asn  
35 40

<210> 62  
<211> 43  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Consensus sequence for *Galleria* peptides

<220>  
<221> MISC\_FEATURE  
<222> (1)..(1)  
<223> Xaa = GLY, PRO, ALA or ABSENT, or more preferably GLY or ABSENT

<220>  
<221> MISC\_FEATURE  
<222> (3)..(3)  
<223> Xaa = ILE, VAL, ALA, LEU, MET or PHE, or more preferably ILE or VAL

<220>  
<221> MISC\_FEATURE  
<222> (4)..(4)  
<223> Xaa = PRO, GLY, ASN, GLN or HIS, or more preferably PRO or ASN

<220>

<221> MISC\_FEATURE  
<222> (5)..(5)  
<223> Xaa = ILE, VAL, ALA, LEU, MET or PHE, or more preferably ILE or VAL

<220>  
<221> MISC\_FEATURE  
<222> (6)..(6)  
<223> Xaa = LYS, ARG, GLY, PRO, ALA, ASN, GLN or HIS, or more preferably LYS, GLY or ASN

<220>  
<221> MISC\_FEATURE  
<222> (13)..(13)  
<223> Xaa = GLN, ASN, HIS, LYS or ARG, or more preferably GLN or LYS

<220>  
<221> MISC\_FEATURE  
<222> (14)..(14)  
<223> Xaa = ILE, VAL, ALA, LEU or GLY, or more preferably ILE or ALA

<220>  
<221> MISC\_FEATURE  
<222> (16)..(16)  
<223> Xaa = GLY, PRO, ALA, LYS or ARG, or more preferably GLY or LYS

<220>  
<221> MISC\_FEATURE  
<222> (18)..(18)  
<223> Xaa = VAL, LEU, ILE, GLY, PRO or ALA, or more preferably ALA or GLY

<220>  
<221> MISC\_FEATURE  
<222> (19)..(19)  
<223> Xaa = ILE, VAL, MET, ALA, PHE or LEU, or more preferably LEU or PHE

<220>  
<221> MISC\_FEATURE  
<222> (20)..(20)  
<223> Xaa = ARG, LYS, GLY, PRO or ALA, or more preferably ARG, GLY or LYS

<220>  
<221> MISC\_FEATURE  
<222> (21)..(21)  
<223> Xaa = GLY, PRO, ALA, VAL, ILE, LEU, MET or PHE, or more preferably GLY or VAL

<220>  
<221> MISC\_FEATURE  
<222> (22)..(22)  
<223> Xaa = ILE, LEU, VAL, ALA, MET or PHE, or more preferably VAL, ILE or LEU

<220>  
<221> MISC\_FEATURE  
<222> (23)..(23)  
<223> Xaa = ASN, GLN, HIS, GLY, PRO, ALA, SER or THR, or more preferably ASN, GLY or SER

<220>  
<221> MISC\_FEATURE

<222> (24)..(24)  
<223> Xaa = ILE, VAL, ALA, LEU or GLY, or more preferably ILE or ALA

<220>  
<221> MISC\_FEATURE  
<222> (26)..(26)  
<223> Xaa = SER, THR, GLY, PRO or ALA, or more preferably SER or GLY

<220>  
<221> MISC\_FEATURE  
<222> (30)..(30)  
<223> Xaa = ASP or GLU

<220>  
<221> MISC\_FEATURE  
<222> (31)..(31)  
<223> Xaa = ILE, LEU, VAL, ALA, MET or PHE, or more preferably ILE or VAL

<220>  
<221> MISC\_FEATURE  
<222> (32)..(32)  
<223> Xaa = ILE, LEU, VAL, ALA, TYR, TRP or PHE, or more preferably ILE or TYR

<220>  
<221> MISC\_FEATURE  
<222> (33)..(33)  
<223> Xaa = SER, THR, ASN, GLN, HIS, GLU or ASP, or more preferably SER, ASN or GLU

<220>  
<221> MISC\_FEATURE  
<222> (34)..(34)  
<223> Xaa = GLN, ASN or HIS, or more preferably GLN or HIS

<220>  
<221> MISC\_FEATURE  
<222> (35)..(35)  
<223> Xaa = PHE, LEU, VAL, ALA, ILE or MET, or more preferably PHE, VAL or ILE

<220>  
<221> MISC\_FEATURE  
<222> (36)..(36)  
<223> Xaa = LYS or ARG

<220>  
<221> MISC\_FEATURE  
<222> (37)..(37)  
<223> Xaa = PRO, GLY, ASN, GLN or HIS, or more preferably PRO or ASN

<220>  
<221> MISC\_FEATURE  
<222> (38)..(38)  
<223> Xaa = LYS or ARG

<220>  
<221> MISC\_FEATURE  
<222> (39)..(39)  
<223> Xaa = LYS, ARG, HIS, ASN or GLN, or more preferably LYS, HIS, GLN or ARG

<220>

<221> MISC\_FEATURE  
<222> (40)..(40)  
<223> Xaa = LYS, ARG, HIS, ASN, GLN or ABSENT, or more preferably LYS,  
HIS or ABSENT

<220>  
<221> MISC\_FEATURE  
<222> (41)..(41)  
<223> Xaa = LYS, ARG or ABSENT, or more preferably LYS or ABSENT

<220>  
<221> MISC\_FEATURE  
<222> (42)..(42)  
<223> Xaa = ASN, GLN, HIS or ABSENT, or more preferably ASN or ABSENT

<220>  
<221> MISC\_FEATURE  
<222> (43)..(43)  
<223> Xaa = HIS, ASN, GLN or ABSENT, or more preferably HIS or ABSENT

<400> 62

Xaa Lys Xaa Xaa Xaa Xaa Ala Ile Lys Lys Gly Gly Xaa Xaa Ile Xaa  
1 5 10 15

Lys Xaa Xaa Xaa Xaa Xaa Xaa Ala Xaa Thr Ala His Xaa Xaa Xaa  
20 25 30

Xaa  
35 40